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STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petitions of
the Las Virgenes Municipal Water
District for Review of Actions by
the California Regional Water
Quality Control Board, Los Angeles
Region, on February 28 and April 25,
1977, and Related Petitions to
Intervene. Our File No. A-164.

Order No. WQ 78-4

BY THE BOARD:

On February 28, 1977, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board), reconsidered its Order No. 76-27 (NPDES Permit No. CA0056014) providing waste discharge requirements for the seasonal discharge of effluent to Malibu Creek from the Las Virgenes Municipal Water District's (petitioner's) Tapia Wastewater Reclamation Plant (Tapia Plant), to determine whether the application of the District for a year-round discharge should be approved. At that time the Regional Board declined to take any action on the application for waste discharge requirements for an all-year discharge of 4.5 million gallons per day to Malibu Creek, until certain environmental documents were made available. On March 21, 1977, the petitioner filed its initial petition for review of the Regional Board's action, and was advised that the matter would be held in abeyance pending further action by the Regional Board.

Environmental documents having been made available, the Regional Board, on April 25, 1977, again considered the petitioner's application and voted to deny the request for a year-round discharge

to Malibu Creek. Subsequently, on May 6 and 12, 1977, the State Water Resources Control Board (State Board) received the Supplement to the Petition For Review and Second Supplement to the Petition For Review.

During the months of June and July, 1977, a letter was sent to persons thought to be most interested and involved in this matter. The letter, enclosing copies of the petition, supplemental petitions and appropriate regulations, indicated how the recipients could express their views on this matter to the State Board. Subsequently, the State Board received numerous letters of concern and four petitions to intervene in this matter from the following persons and/or organizations (intervenors):

- Mrs. Marilyn Myerly for herself and the Malibu Canyon Property Owners Association
- Mrs. Joan H. Kay for the Monte Nido Valley Property Owners Association
- Mr. Harold H. Lyon for the Malibu Chamber of Commerce
- Mr. Rodney Bergen

I. BACKGROUND

A. The Waste Treatment Plant and Waste Discharge Requirements

The petitioner owns and operates the Tapia Plant situated adjacent to Malibu Creek in Los Angeles County.

"Geographically, the Tapia Plant is located near Malibu Creek and discharges to it. Just downstream from the Tapia Plant Malibu Creek passes through Tapia Park, a county park owned and operated by the Los Angeles County Department of Parks and Recreation.

"At its mouth, Malibu Creek traverses a small alluvial plain and forms a lagoon at the ocean shore. Public access to Malibu Creek in the vicinity of the discharge is generally limited to the areas adjacent to and immediately upstream and downstream of Tapia Park and to the tidal prism area. This relative inaccessibility is principally due to topography and private ownership of property which provides only limited access. Picnicking, hiking, fishing, beachwalking, wading and surfing are generally limited to the areas of accessibility mentioned above. Beneficial uses of Malibu Creek and the lagoon are specified in the applicable water quality control plan and include water contact recreation, noncontact water recreation, wildlife habitat, cold and warm freshwater habitat and fish spawning and migration.^{1/}

The Tapia Plant has an activated sludge treatment process with nitrification and a design capacity of 8 million gallons per day (MGD). Currently, most of the wastewater from the plant is disposed on land.^{2/} A small portion of the effluent is reclaimed for agricultural use and landscape irrigation and the greater portion is applied to spray disposal areas where cropping is a by-product of disposal. Recently, from mid-March to mid-November, effluent flows in excess of that which can be reclaimed or applied to land disposal areas have been placed in a number of percolation ponds.^{3/}

From mid-November to mid-March the petitioner may (and does generally) dispose of Tapia's wastewater to Malibu Creek

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1. State Board Order No. 76-11, pp. 1-2.
 2. The waste discharge requirements adopted by the Regional Board for water reclamation and land disposal are not placed in issue by this petition.
 3. The future availability of the percolation ponds for waste disposal is uncertain. A number of persons, including some of the petitioners to intervene in this matter, have petitioned for review of several orders of the Regional Board permitting this method of wastewater disposal.

in accord with Order No. 76-27. Alleging that presently available land disposal options are exhausted, the petitioner desires to discharge treated effluent to Malibu Creek on a year-round basis. In pursuing its desire, the petitioner has encountered much opposition from various persons, associations, etc., situated in and about Malibu Creek.

B. Prior Actions By The State Board

The State Board has resolved earlier petitions regarding the Tapia Plant,^{4/} and has several related petitions pending. The particular matter under consideration here has its beginning in September of 1975, when the petitioner filed a report of waste discharge proposing an all-year discharge of about 4.3 MGD of wastewater to Malibu Creek. On March 22, 1976, the Regional Board denied the petitioner's proposal and reaffirmed its earlier Order No. 76-27 (permitting only a seasonal discharge to the Creek). A petition for review of the foregoing Regional Board action (brought by the same petitioner herein named) was resolved by State Board Order No. WQ 76-11 on August 19, 1976. Among the findings made by the State Board in that Order are the following:

"The issue raised by petitioner is whether the year-round prohibition which was in effect imposed against it on March 22, 1976, is in fact appropriate. Included within this general issue, is the issue of whether the partial prohibition related to discharge between mid-November and mid-March contained in Order No. 76-27 is appropriate.

4. State Board Orders Nos. WQ 76-11 and 75-30.

"In our estimation, a total or partial prohibition against a proposed discharge is appropriate when the prohibition involved is necessary:

1. To implement properly an approved and relevant water quality control plan;

2. To protect water quality and beneficial uses, i.e., to prevent nuisance, pollution, or contamination;

3. To protect adequately against environmental damage, to minimize adverse environmental impacts, or to ensure long-term protection of the environment.

"To date, only two reasons have been advanced to justify a prohibition or limitation upon a discharge by petitioner to Malibu Creek or its tributaries. Both involve alleged water quality concerns. It has been alleged, (1) that the petitioner's discharge would create excess algae growth in Malibu Creek, and (2) that the discharge would adversely affect public health particularly due to the alleged viruses contained in the effluent from the Tapia Plant.

"With respect to the problem of algae growth, the preponderance of the evidence in the record before us indicates that excess algae growth resulting from a discharge to Malibu Creek by the petitioner is not likely. In addition, at the March 22, 1976, hearing before the Regional Board, the petitioner, the Department of Water Resources, and the Department of Fish and Game indicated that, in their opinion, the discharge of petitioner would not cause an increase in algae per unit area of stream.

"With respect to the alleged health problem, we pointed out in State Board Order No. WQ 75-30 that 'the Tapia Plant is an excellently operated and maintained treatment plant which produces an excellent effluent. As a matter of fact, the quality of the effluent actually exceeds the basic numerical parameter set forth in Section 60315', i.e., the disinfection criteria sought by the Department of Health.... 'Again, the evidence indicates that the turbidity parameter sought by the Department of Health is, in fact, being met, and even exceeded, by the District' ... 'In summary, although the District does not have a treatment process which at present utilizes coagulation, sedimentation and filtration, it does produce an effluent which meets and even exceeds the basic constituent limits desired by the State Department of Health.'

"We also noted in the same order that '[f]rom the testimony presented...concerning levels of treatment, the configuration of Malibu Canyon, and both air and water temperatures during the mid-November to mid-March period, we must conclude that the dangers from virus due to the subject discharge are negligible.'

"Further uncontradicted expert evidence of a substantial and persuasive nature was received at the Regional Board hearing on March 22, 1976, which indicated no health problems could be anticipated from the proposed year-round discharge.

"Again, on the basis of the present record, we must fairly conclude that the vast preponderance of the evidence indicates that the proposed year-round discharge to Malibu Creek does not present a threat to public health."

The State Board concluded, also, that "[t]he present record does not justify a prohibition against the proposed year-round discharge... to Malibu Creek".

The matter was then remanded to the Regional Board for adoption of waste discharge requirements or for development of a record that would support a discharge prohibition. This petition, then, arises out of our conclusions in Order No. 76-11 and the Regional Board's efforts during proceedings on February 28 and April 25, 1977.(discussed in the first two paragraphs of this order) to comply with Order No. 76-11.

C. Petitions To Intervene

Mrs. Myerly filed a petition to intervene on July 8, 1977 for herself and on behalf of the Malibu Canyon Property Owners Association (Malibu Canyon Association). The petition to intervene indicates that Malibu Creek flows over (or through) property owned

by Mrs. Myerly and that the Malibu Canyon Association "...is an organization of over 100 people owning property in close proximity to Malibu Creek".

Mrs. Kay filed a petition to intervene on July 5, 1977, on behalf of the Monte Nido Valley Property Owners Association (Monte Nido Association). Materials contained in the record indicate that the Monte Nido Association is a nonprofit organization of home owners living in the Monte Nido Valley.

Mr. Bergen filed a petition to intervene on August 8, 1977, on his own behalf, alleging that he lives near the Tapia plant.

Mr. Lyon filed a petition to intervene on July 18, 1977, on behalf of the Malibu Chamber of Commerce, which it is alleged, represents the residents and businesses of Malibu.

The petitions to intervene were accepted by letters to each petitioner dated November 15, 1977, from the Chief Counsel of the State Board.

D. Request for Public Hearings

Intervenors Bergen, Kay, et al, and Myerly, et al, requested a public hearing by the State Board prior to the disposition of this matter. Intervenors Bergen and Kay, et al, requested a hearing because they wished to subpoena certain working records of Dr. Lawrence H. Frommhagen, Ph.D. The intervenors believe (for unstated reasons) that such records could be used to attack the credibility of certain testimony by Dr. Frommhagen with respect to the threat of pathogens in the effluent from the Tapia Plant. Intervenor Kay, et al, additionally recites that because of "...the lateness of the hour and

the lengthy proceedings of both the February 28 and April 25 hearing..." intervenor "...did not sufficiently amplify...on pathogens and algae...." Intervenor Kay, et al., and Myerly, et al., also express the desire to present evidence "formerly unknown" indicating that earlier reports on the amounts of naturally occurring nutrients in Malibu Creek were biased by non-point discharges from spray fields used to dispose of the Tapia Plant's effluent. Intervenor Kay, et al., and Myerly, et al., additionally, express the desire to submit additional evidence with respect to downstream impact of the Simi Valley Treatment Plant respecting algae, on the theory that the Tapia Plant will have similar effects.

Numerous public hearings have been held regarding the proposed discharge to Malibu Creek. As indicated, previously, the Regional Board has held hearings regarding this proposal on March 22, 1976, and on February 28 and April 25, 1977. Intervenor have, by and large, participated at all of these proceedings. Other related hearings regarding the discharge of effluent during and following periods of precipitation and between mid-November to mid-March were held by the Regional Board on November 18, 1974, July 27, 1975 and January 1, 1976, and by the State Board on December 18, 1975. Many of the issues raised herein were also raised by the intervenors or others at these earlier hearings.

Further, all parties to this proceeding were given an opportunity, consistent with State Board regulations (Title 23, California Administrative Code Section 2052(b)) to submit to the State Board in writing any additional materials that they wished the State Board to consider. We do not believe that an additional hearing is necessary to resolve the issues raised by the petitioner or intervenors. All interested persons and parties have had liberal opportunities to be heard and submit materials in writing.

II. CONTENTIONS AND FINDINGS

1. Contentions: The petitioner contends that the Regional Board's refusal to issue waste discharge requirements until the petitioner prepared certain environmental documents was improper.

Intervenor Bergen contends that an Environmental Impact Report must be completed before waste discharge requirements may be issued and intervenor Myerly, et al, contends that the Regional Board's deferral of action on the petitioner's application on February 28, 1977 was appropriate.

Findings: To reiterate, on February 28, 1977, the Regional Board reconsidered Order No. 76-27, providing waste discharge requirements for the seasonal discharge of effluent to Malibu Creek from the Tapia Plant. With certain exceptions, Section 13389, California Water Code, exempts the State Board and the Regional Board from preparation of an Environmental Impact Report or a Negative Declaration, pursuant to the California Environmental Quality Act (CEQA), when issuing waste

discharge requirements for discharges to waters of the United States.^{5/} This section is applicable to the proposed discharge. Nevertheless, the Regional Board deferred any action on the petitioner's application for an all-year discharge to Malibu Creek until the petitioner prepared either a Negative Declaration, an Environmental Impact Report or other information which would enable the Regional Board to determine whether the proposed project would have a significant effect on the environment.^{6/} The initial petition filed on March 21, 1977, asserted this action was improper because the time for challenging the petitioner's failure to prepare environmental documents pursuant to CEQA had expired. Nevertheless, on March 28, 1977, the petitioner's Board of Directors adopted the Negative Declaration for "Interim Creek Disposal" to Malibu Creek and following the April 25, 1977 action of the Regional Board, the petitioner concluded that this issue was now moot.^{7/} The initial study and Negative Declaration indicate that the proposed discharge will not have a significant effect on the environment. Limitations within the California Environmental Quality Act (CEQA) now preclude any challenge to the project on CEQA grounds.^{8/} While no question has been raised, the same limitation

5. See Section 21000, et seq., Public Resources Code.

6. Section 2717, Subchapter 17, Chapter 3, Title 23, California Administrative Code.

7. See Second Supplement to Petition for Review, bottom page 2.

8. Section 21167, Public Resources Code, Simi Val. Recreation and Park District v. Local Agency Formation Commission (1975) 124 Cal.Rptr. 635, 51 Cal.App. 3d 648.

bars any challenge to the propriety of the adoption of the Negative Declaration. It was appropriate for the Regional Board to consider adoption of waste discharge requirements for the year-round discharge of effluent to Malibu Creek following the petitioner's adoption of the Negative Declaration.

2. Contention: It is contended that by having refused to issue waste discharge requirements for the year-round discharge of effluent to Malibu Creek, the Regional Board has become obligated to make financial assistance available to the petitioner pursuant to the Revenue and Taxation Code.^{9/}

Findings: We disagree. Section 2209(c), Revenue and Taxation Code, provides in part:

"It is the intent of the legislature that the State Water Resources Control Board and regional water quality control boards will not adopt enforcement orders against publicly owned dischargers which mandate major waste water treatment facility construction costs unless federal financial assistance and state financial assistance pursuant to the Clean Water Bond Act of 1970 and 1974 is simultaneously made available.

"'Major' means either a new treatment facility or an addition to an existing facility, the cost of which is in excess of 20% of the cost of replacing the facility."

The petitioner argues that in order to comply with Order No. 76-27, providing waste discharge requirements for land disposal, it will be required to purchase "...large quantities of irrigation pipe and appurtenances (currently rented) and several hundred acres of land...." It is asserted that these costs will approximate \$4.5 million and that the total construction cost of the existing facility was approximately \$10 million.

9. Supplement to Petition for Review.

In response, we note that the Tapia Plant has long been subject to a prohibition of discharge to Malibu Creek. Order No. 74-362 (the most recent revision of requirements for the plant prior to the effective date of Revenue and Taxation Code Section 2209(c)) was not an "enforcement order" within the meaning of Section 2209(c) or any provision of the law governing the conduct of the Regional Board.^{10/} Order No. 74-362 permitted discharge to the Creek only during and immediately after periods of high rainfall. The amounts the petitioner contends it will have to spend in order to continue to meet the requirement that no discharge occur except in winter are not the result of any new regulatory initiative by the Regional Board taken after the effective date of Section 2209(c), but are merely caused by normal growth in influent flows to the Tapia Plant from new connections made to its sewer system and the resulting need for more equipment and land to dispose of the increased flows. Order No. 74-362 predated the effective date of Section 2209 (as initially adopted in 1974) by about one month and the language contained in Section 2209 indicates the Section was intended to have prospective application only. We conclude, therefore, that this contention is without merit.

3. Contention: The petitioner contends that the record will not support the Regional Board's refusal to issue waste discharge requirements for the year-round discharge of effluent to

10. Section 13000 et seq., Chapter 1, Division 7, California Water Code.

Malibu Creek.^{11/} More specifically, it is contended, the record does not contain substantial evidence indicating that the prohibition against year-round discharge is necessary:

- "1. To implement properly an approved and relevant water quality control plan;
- "2. To protect water quality and beneficial uses, i.e., to prevent nuisance, pollution, or contamination;
- "3. To protect adequately against environmental damage, to minimize adverse environmental impacts or to ensure long-term protection of the environment."^{12/}

This broad contention shelters many more limited but specific issues raised by the intervenors and these issues will be identified and discussed in context with the petitioner's argument.

3.A. Contention: Intervenors Bergen, Kay, et al., and Myerly, et al., contend that the proposed discharge of effluent from the Tapia Plant to Malibu Creek would contain pathogens posing a threat to public health. Intervenor Bergen contends, additionally, that the effluent would contain heavy metals (particularly Cadmium) in concentrations harmful to public health.^{13/}

Findings: There is no threat to public health by the concentrations of Cadmium in the Tapia Plant's effluent. Mr. Bergen notes there is a correlation between Cadmium and heart disease and notes that the Department of Fish and Game has reported increased

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11. This contention is contained in the initial petition for review of the Regional Board's action on February 28, 1977, however, we believe the petitioner also intends it to apply to the April 25, 1977 action of the regional Board.
 12. These evidentiary standards for a prohibition were set forth in State Board Order No. 76-11, see page 4, supra.
 13. It is difficult to determine whether this is a contention because Mr. Bergen makes this argument in the materials submitted in support of his petition to intervene. See letter to the Regional Board dated April 26, 1977. Other contentions contained therein are too general to be dealt with.

levels of Cadmium in fish continually tested in the effluent from the Tapia Plant.^{14/} While Mr. Bergen provides no additional data to indicate that the levels of Cadmium contained in the effluent are found in concentrations that would lead to a correlation with heart disease, we believe this issue can be dismissed because neither the Tapia Plant's effluent nor the waters of Malibu Creek are used for providing drinking water to the public. Further, the average concentration of Cadmium in the existing discharge^{15/} is lower than the 0.01 mg/l maximum permissible Cadmium concentration called for in drinking water standards published by the United States Environmental Protection Agency.^{16/} Finally, we note that the State Department of Health has not expressed any concern regarding the level of Cadmium in the effluent.

With respect to the alleged threat to health from pathogens in the Tapia Plant effluent we will limit our examination of the record to new evidence obtained subsequent to the August 19, 1976 date on which Order No. 76-11 was adopted. It should be pointed out that the State Board has addressed this very issue on two earlier occasions and concluded that there was no threat to public health from the discharge of Tapia's effluent to Malibu Creek. In the first instance we stated:

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14. It is assumed that Mr. Bergen is referring to the report entitled "Accumulation of Heavy Metals from Tapia Treatment Plant in Rainbow Trout, Salmo Gairdnerii and Fathead Minnows, Pine Phales Promelas", Perry L. Herrgesell, Ph.D., and Brian D. Quelvog, Department of Fish and Game, November 1976. While the report notes the accumulation of various metals in tested fish, it also concludes that there were no acute effects on the fish tested.
 15. The Cadmium concentration in the petitioner's effluent is derived from self-monitoring reports.
 16. 40 CFR 141.11.

"...there is at present very little factual data related to viral spread due to contact with wastewater. Various studies are underway at present which may provide some definitive answers in this area. From the testimony presented at the November 17, 1975, hearing concerning levels of treatment, the configuration of Malibu Canyon, and both air and water temperatures during the mid-November to the mid-March period, we must conclude that the dangers from virus due to the subject discharge are negligible.^{17/}

In the second instance, we stated in part:

"...on the basis of the present record, we must fairly conclude that the vast preponderance of the evidence indicates that the proposed year-round discharge to Malibu Creek does not present a threat to public health."^{18/}

We note, first, that there does not appear to have been any professionally competent testimony presented during the Regional Board hearings to support the intervenor's contention. Secondly, the Department of Health is in general agreement with the order proposed by the Regional Board staff. Its position, however, was dependent upon the existence of Effluent Limitation 10 in the Regional Board staff's proposed order which requires removal of pinpoint floc.^{19/} The order proposed to the Regional Board by its staff provided for a twelve month test period during which discharges would be permitted to the Creek to

17. State Board Order No. WQ 75-30, p. 11, December 18, 1975.

18. State Board Order No. WQ 76-11, August 19, 1976. For complete text see pages 5 and 6, supra.

19. Letter of February 24, 1977 to Ray Hertel from Department of Health and signed by William J. MacPherson and Norman F. Hauret. See comments of Bill MacPherson, District Engineer, State Department of Health, Los Angeles Office, Transcript of April 25, 1977 public hearing, pp. 103-107. Nevertheless, even without the inclusion of Effluent Limitation 10, the effluent from the Tapia Plant is of a quality that meets the Department of Health's standards for nonrestricted recreational impoundments.

permit analysis of the actual impacts of summertime creek discharges. During the test period, the proposed order required the discharge to occur in a generally inaccessible area (away from Tapia Park) above Rindge Dam in order that the sands and gravels behind the Dam would provide some natural filtration to the wastewater. This is also provided for in the permit (Appendix A) which we adopt as a part of this Order. Thirdly, Laurence H. Frommhagen, Ph.D., testified, in essence, that there would be a very low risk to public health resulting from the discharge of the Tapia Plant's effluent to Malibu Creek.^{20/} Dr. Frommhagen has a Ph.D. in biochemistry and virology and has personally tested Tapia's effluent. Fourth, the petitioner submitted a report to the Regional Board analyzing the health issues involved in the proposed discharge to Malibu Creek by Charles L. Senn. Mr. Senn has respectable credentials in the area of public health and Mr. Senn's report supports Dr. Frommhagen's testimony.^{21/}

20. Transcript of April 25, 1977 Regional Board hearing, pp. 65-72.

21. Pages 272-295 of the April 25, 1977 staff report to the Regional Board on this matter. Mr. Senn's qualifications are:

P.E., R.S.
Former Director, Graduate Environmental
Health Management Program, U.C.L.A.'s
School of Public Health;
Former Professor of Environmental Health,
California State University at Northridge;
Former Environmental Health Director of
Los Angeles City; and
Presently Environmental Consultant-Engineer
Environmental Consulting Associates.

See p. 276-279 for Mr. Senn's evaluation on this issue.

Such evidence as there is in the record in support of the intervenor's position is, perhaps, best summarized under Part IV., entitled, "Pathogens", in the December 5, 1977 submittal by Joan Kay, et al. Notwithstanding the intervenor's submittals, our review of the record leads us to conclude that the preponderance of competent evidence indicates that the proposed year-round discharge to Malibu Creek does not present a threat to the public health.

3.B. Contention: Intervenors allege that the proposed discharge may become a nuisance and serve as a breeding place for insects which would become vectors for disease.^{22/}

Findings: On January 14, 1977, Mir S. Mulla, Professor of Entomology, at the University of California, Riverside, provided a written report to the petitioner analyzing the mosquito breeding potential if the Tapia Plant wastewater were discharged into Malibu Creek. The report states in part:

"Mosquitos propagate in stagnant water or portions of a stream that is clogged with emergent vegetation. The potential for mosquito production seems to be greater when the water flow in the creek is impaired or minimal, resulting in the creation of pools, puddles and discontinuous depressions. In general, creeks and streams with continuous sheet flow are not suitable habitats for mosquito breeding. In such streams, water current wash the immature stages of mosquitoes downstream. Additionally, in continuous and deeper bodies of water, predators such

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22. Intervenors also allege the existence of certain nuisance conditions arising out of continuous upsetting reports in newspapers and from the lighting at the waste treatment plant. Such matters are beyond our province. Of more concern, it is alleged that there are existing odor and insect problems associated with the waste treatment plants operation. While such allegations are not germane to this inquiry, since we are not considering whether the plant should continue to operate but only whether a year-round discharge should be permitted, the Regional Board, if it has not already done so, should take cognizance of these allegations.

as mosquito fish and others have greater capability to decimate mosquito larval populations. Therefore, continuous substantial water flow will result in marked reduction in mosquito production, if any, along a major portion of the creek. At this time, no information is available to substantiate that discharge of reclaimed water into the creek will increase mosquito breeding potential over and above the current level which prevails under the low flow conditions during the warmer months. During the summer, mosquito breeding probably occurs in some parts of the creek, even though no reclaimed water is discharged. In the event of water discharge, the lagoon area under tidal influence should not contribute to the problem any more than it does at the present time. Some increase in breeding may occur if increased flow produces stagnant pools above the tidal zone."

To summarize, Professor Mulla concluded that increased mosquito production due to the proposed year-round discharge is unlikely.

"The whole area potentially affected by the discharge is within the Los Angeles County West Mosquito Abatement District. ...it would be recommended that the LVMWD collaborate, cooperate and participate with the Mosquito Abatement District's staff...in taking whatever steps may be necessary to...control any breeding of mosquitoes or gnats which may be attributable to the proposed year-round discharge."^{23/}

General Requirement C.3. of the order proposed to the Regional Board on April 25, 1977, addressed this problem by providing:

"The discharge of waste to watercourses shall not result in problems due to breeding of mosquitoes, gnats, midges or other pests."

We conclude that the discharge will not cause an insect problem in Malibu Creek.^{24/} A trial discharge period as provided for in the permit which we adopt as a part of this Order will provide additional evidence regarding this issue.

23. Page 289 of the April 25, 1977 staff report to the Regional Board on this matter.

24. It may be that the increased flows would reduce the problem. (See quotation from the report of Professor Mulla, above.)

3.C. Contention: The intervenors contend that the proposed year-round discharge of Tapia's effluent will result in the increased growth of algae in Malibu Creek.

Findings: Inasmuch as the State Board considered this issue within Order No. WQ 76-11, on August 19, 1976, we will limit our examination to additions made to the record subsequent to that date. Order No. WQ 76-11 provided in part:

"With respect to the problem of algae growth, the preponderance of the evidence in the record before us indicates that excess algae growth resulting from a discharge to Malibu Creek by the petitioner is not likely. In addition, at the March 22, 1976, hearing before the Regional Board, the petitioner, the Department of Water Resources, and the Department of Fish and Game indicated that, in their opinion, the discharge of petitioner would not cause an increase of algae per unit area of stream."

During the subsequent hearings, the aforementioned agencies did not alter their views with respect to the problem of algae. We note the expert evidence presented during the March 22, 1976, Regional Board hearing indicating that there are more than sufficient nutrients in the Malibu Creek watershed to support an abundant algae growth and that the further addition of nutrients by the District would not result, probably, in increased algae growth^{25/}. This view is further reinforced by several more recent reports^{26/} There

25. March 22, 1976, Transcript of Regional Board Hearing, pp. 9, 10, 102, 125 and 130.

26. Letter to Kathleen Gordon from the Department of Parks and Recreation dated September 2, 1977; Memorandum of Inspection by Al Franks dated August 15, 1977, and September 19, 1977.

We draw this conclusion notwithstanding the view of several intervenors that earlier reports on the amounts of naturally occurring nutrients in Malibu Creek were biased by non-point discharges to portions of Malibu Creek by the petitioner. There is sufficient monitoring data beyond areas affected by any non-point runoff to support this conclusion.

are also observations, however, tending to support the view that algae may become a problem in the shorter lower reach of Malibu Creek just before the Creek joins Malibu Lagoon. It is in this reach that the waters of the stream move more slowly through shallow pools and the broader stream bed and become warmer, promoting conditions more favorable to the growth of algae.^{27/} It is further indicated that, in years past, the lower reach of Malibu Creek tended to dry up, thus preventing the growth of algae. The latter observations could, arguably, support the proposition that the petitioner's discharge to Malibu Creek would enhance the growth of algae because of the year-round flow. However, we agree with the opinion of the experts for the petitioners, the Department of Water Resources and the Department of Fish and Game that the proposed year-round discharge will not result in an increase of algae per unit of stream. While the record provides no foundation at this time for prohibiting the discharge to Malibu Creek based upon potential algae increases, in order to insure that no problems arise, we conclude that algae growth should be further tested by a trial discharge period through summer months. This is provided for in the permit (Appendix A) which we adopt as a part of this Order.

3.D. Contention: Intervenor's contend that once the petitioner is permitted to discharge to Malibu Creek on a year-round basis, it will not be possible to compel the petitioner to remove its discharge from the Creek. By extension, the intervenors fear that if

27. See Footnote 26, supra.

the petitioner is permitted to discharge 4.5 mgd to the Creek, then it will not be possible to stop the petitioner from discharging much greater volumes of effluent into the Creek five, ten or more years hence.^{28/}

Findings: The record indicates that the petitioner's current ability to dispose of existing flows to areas other than Malibu Creek is at or near capacity.^{29/} Indeed the petitioner argues that if it is not permitted to discharge to Malibu Creek on a year-round basis it must undertake a significant program to acquire use of additional disposal areas and equipment^{30/}. Assuming the petitioner were permitted to discharge to Malibu Creek and that problems subsequently arose that required termination of the Creek discharge, the question arises, whether the petitioner would be capable of returning its effluent to off-stream disposal areas. An answer is made more difficult in view of the annual growth in new connections and wastewater flows to the Tapia Plant.^{31/} Notwithstanding the intervenors' concern, we do not believe the problem is unsurmountable. During the proposed test period for the year-round discharge to Malibu Creek, the petitioner must maintain the existing non-stream disposal facilities used, currently, for existing flows. In the event the petitioner

28. Principally, Kay, et al., and Lyon, et al.

29. See pp. 12 and 13, Petition for Review.

30. See page 1, Supplement to Petition for Review.

31. The Regional Board's April 25, 1977 staff report indicates annual growth is about 5 percent.

loses some of those areas for reasons beyond its control (e.g., some lands may be withdrawn from disposal use by the Department of Parks and Recreation) the petitioner must provide additional off-stream disposal capability sufficient to dispose of the growth in wastewater flows to the Tapia Plant during the test period. Waste discharge requirements, adopted as a part of this Order (Appendix A) requires this. It is the intent of this Board that should this provision not be complied with by the petitioner for any reason whatsoever, the discharge to the Creek shall be prohibited in accordance with Regional Board Order No. 76-27 until such capacity is available.

Although the intervenor's fear that authorization of a 4.5 mgd discharge will lead to a much greater discharge to Malibu Creek in the future, such an increase in the discharge is not inevitable. Granted, planning documents for the petitioner's service area indicate that the petitioner will experience growth of considerable magnitude in the future.^{32/} These documents, however, deal in possibilities, merely, and do not establish what plant or plants will be used to treat these envisioned flows nor whether flows would be discharged after treatment by the petitioner.^{33/} Inasmuch as the Tapia Plant has a design capacity of 8.0 mgd, it may be expected that the petitioner plans to treat wastewater flows of that magnitude at the plant. Although we expect that the petitioner will request,

32. See the Water Quality Control Plan Report for Los Angeles River Basin (4B), Part II, page II-16-268. The Regional Board's April 25, 1977 staff report, states that the projected ultimate population which the Tapia Plant might serve in 40 to 100 years could be as much as 28 mgd and that the petitioner expects flows approaching 16 mgd by the year 2000.

33. As recently as June 27, 1977, a report prepared by H. W. Stokes, general manager for the petitioner, indicated that the option of constructing alternative waste treatment plants may be cost competitive with any future expansion of the Tapia Plant.

eventually, authorization to discharge those flows to Malibu Creek, our decision to authorize a 4.5 mgd year-round test does not indicate any decision on our part that still larger flows would be approved or disapproved in the future. In the event permission to discharge larger flows is requested, the issue will have to be reexamined.

3.E. Other Contentions and Findings: Intervenor Myerly, et al., is concerned that the discharge of 4.5 mgd of treated wastewater to Malibu Creek will inundate Cross Creek Road. Cross Creek Road is one of two roads providing access to a number of residences situated along the southern edge of Malibu Creek and about a mile to a mile and a half from the Pacific Ocean. The Regional Board's April 25, 1977, staff report states in part:

"The discharge of 4 mgd from the Tapia Plant even with no other flow in the creek reaching Cross Creek Road would probably amount to about 1-2 inches of water across Cross Creek Ford, certainly not enough to interfere with vehicle travel. If there were "natural flow" (other than that from Tapia) in the creek, the flow channel would be wider than at dry conditions and 4 mgd from Tapia would represent less than 1-2 inches above the flow already in the stream."

Intervenor Bergen suggests that the discharge to Malibu Creek "...poses the threat of potential landslide, buckling, erosion, slumping and even seismic displacement of the supporting strata of nearby homes and property." Mr. Bergen provided no substantiating information and we believe his suggestion is unfounded (see quote from Regional Board staff report on page 23, above). However, the test period provided by the permit which we adopt as a part of this Order should provide additional information regarding this issue. Mr. Bergen

suggests, also, that the proposed discharge to Malibu Creek would "compromise" Tapia Park. We believe such fears are equally unfounded.^{34/}

Mr. Lyon, et al., believes the proposed discharge to Malibu Creek will alter the salt-fresh water mix in Malibu Lagoon and that any such changes is per se, undesirable. No substantiating documentation is provided by Mr. Lyon.^{35/} We believe the strong support for the proposed discharge by the Department of Fish and Game carries more weight than Mr. Lyon's indefinite concerns.^{36/}

Sundry allegations of violations by the petitioner of existing waste discharge requirements have been put forth by the intervenors. The intervenors contend, apparently, that based on past performance the petitioner is not capable of meeting the waste discharge requirements proposed to the Regional Board. Alleged violations regarding the petitioner's failure to retain effluent in spray disposal areas are not relevant to the Tapia Plant's ability to provide a given level of treatment. The intervenors allege, additionally, however, that the petitioner has, on occasion, failed to comply with effluent

34. See discussion under Contentions 3.A., B. and C., supra.

35. It is interesting to observe that, only a few miles away, it was found that wastewater from the City of Buenaventura waste treatment plant (NPDES Permit No. CA0053651) was needed to keep the Santa Clara lagoon from becoming too saline.

36. See letter dated February 3, 1977, to Ray Hertel from the Department of Fish and Game.

limitations. While we believe the Tapia Plant is capable of providing the requisite level of waste treatment, a test discharge period will provide additional data on this issue.

Concern has been expressed that the proposed discharge may raise the level of the groundwater in the area of Malibu Lagoon. We think this is improbable because the groundwater in that area should approximate the mean tidal fluctuation. Nevertheless, the Executive Officer of the Regional Board is directed to modify the monitoring requirements to require groundwater monitoring during the test period.

To conclude this discussion, our review of the existing record has failed to reveal any substantive basis for denying the petitioner authorization to discharge to Malibu Creek.^{37/}

III. ADDITIONAL FINDINGS

While we anticipate that the proposed year-round test discharge to Malibu Creek will prove successful, we are concerned that the petitioner will relax its efforts to apply the Tapia Plant's effluent to true reclamation uses. Having obtained state and federal grant funding to build a facility capable of producing effluent for reclamation purposes, the petitioner has an affirmative obligation to make the maximum practicable use of the Tapia Plant's effluent for existing reclamation uses and to make maximum efforts to develop new reclamation uses.

37. Indeed the Water Quality Control Plan, Los Angeles River Basin (4B), Part I, Chapter 5, pp. 95 and 96 encourages a test of stream flow augmentation in Malibu Creek on a year-round basis.

IV. CONCLUSIONS

After review of this matter, and for the reasons heretofore expressed, we conclude that waste discharge requirements should be issued to the petitioner for a year-round discharge for a one year test period and that the order proposed to the Regional Board by its staff on April 25, 1977, was generally appropriate and proper.

The year-round test period for the discharge shall commence upon the date of actual discharge for that purpose. During and at the conclusion of twelve months of year-round discharge, the petitioner shall submit such data as the Regional Board deems necessary to evaluate the effects of the discharge. Following the twelve month test period, the discharge may continue until such time as the staff of the Regional Board reports the results of the test discharge to the Regional Board, including any proposed revisions to the waste discharge requirements and the Regional Board adopts any necessary modifications to the requirements (but in no case later than six months after the end of the test period.

If it becomes apparent prior to conclusion of the test period that substantial problems are resulting from the discharge, the Regional Board may initiate any reasonable and necessary modifications to the waste discharge requirements including a flow limitation or prohibition.

V. ORDER

IT IS HEREBY ORDERED THAT:

1. The waste discharge requirements attached hereto and identified as Appendix A are hereby adopted.

2. The waste discharge requirements (Appendix A) are remanded to the Regional Board for all purposes including but not limited to such modifications (if any) as may be necessary and consistent with this order and for all appropriate enforcement activities.

Dated: *March 2, 1973*

/s/John E. Bryson
John E. Bryson, Chairman

/s/W. Don Maughan
W. Don Maughan, Vice-Chairman

/s/W. W. Adams
W. W. Adams, Member